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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/776,522

**Applicant(s)**

MAKUTA, YOHEI

**Examiner**

BRUK A. GEBREMICHAEL

**Art Unit**

3715

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The following office action is a **Final Office Action** in response to communications received on 09/24/2009. Claims 1-2, 11, 13, 16-19 have been amended; claim 15 has been canceled. Thus, claims 1- 14 and 15-22 are pending in this application.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- Claims 11, 14 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), **at the time the application was filed**, had possession of the claimed invention.

Claims 11, 14 and 16 recite the limitation, "the casing has a width W in a lateral direction of the body, a height H parallel to the linear portions of the left and right main frames, and a thickness T orthogonal to the width W and the height H, and wherein **the height H and the thickness T have the relationship  $H > T$** ". However, the disclosure as originally filed appears to be silent regarding the above specific dimension relationship between the height and the thickness of the casing. In addition, one may not conclude from the drawings (e.g. FIG 2 and FIG 3) such dimension relationships between the height and the thickness of the casing since no such specific scale ratio or

association has been indicated in the drawings (or discussed in the original disclosure) that enables one of ordinary skill in the art to recognize the above dimension relationship.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 1, 3-4, 6, 9-14, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605.

Regarding claim 1, Caprai discloses the following claimed limitations, a riding simulation system for providing an operator with a simulated experience of a running condition of a motor cycle (col.1.1, lines 64-66), the system comprising a display for displaying scenery viewable to the operator as a video image on the display (see FIG 1, display not labeled), wherein the video image is simulated based on an operating condition designated by the operator through the operation of an operating condition simulating mechanism (col.3, lines 20-27), a steering handle mechanism capable of being gripped by the operator (FIG 3, labels 42, 56), a body for rotatably securing the steering handle mechanism (FIG 3, label 16).

Caprai further implicitly discloses, the body for rotatably securing the steering handle mechanism comprising a pair of left and right main frames (FIG 2, label 28), a centrally located main frame (FIG 2, label 22).

Caprai does not explicitly disclose, a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend from the left and right main frames in a direction away from the operator of the simulation system, the control unit being mounted in a position between linear portions of the pair of left and right main frames and under centrally located main frame; the position of the control unit being such that a major portion of the control unit extends below where the sub-frames are connected to the left and right main frames.

However, Ritchie teaches, a pair of left and right main frames, a centrally located main frame a pair of sub-frames connected to roughly central portions of the right and left main frames (see Examiner's annotated figure, FIG A which is based on FIG 1 of Ritchie's apparatus, label Pair of sub-frames), and a control unit for the system being mounted in a position between linear portions of the pair of left and right main frames and under the centrally located main frame (see FIG 1, label 3 and also see FIG A regarding the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by incorporating the apparatus of Ritchie in order to provide a more realistic riding or simulation experience to the user, as taught by Ritchie.

With regard to the recited feature, "the pair of sub-frames extending in a direction away from the operator", according to Applicant's specification, the function of the frames is to attach the simulation system to a flat-surface table (see Para.0035, Para.0049 and Para.0051 of Applicant's disclosure). The prior art (e.g. Caprai) also

discloses that the structural features taught in the reference (e.g. see FIG 2, labels 22 and 28) are employed to secure the simulation system on a table (col.3, lines 45-50).

Therefore, it would have been an obvious matter of design choice as to the frame used for securing the simulation system, wherein no stated problem is solved or unexpected result is obtained by prescribing a pair of sub-frames extending in a direction away from the operator.

Caprai in view of Ritchie does not explicitly teach, "the position of the control unit being such that a major portion of the control unit extends below where the sub-frames are connected to the left and right main frames".

However, the criticality or functional limitation disclosed in Applicant's original disclosure regarding the position of the control unit is; the control unit is disposed between the right and left main frames to prevent the overall size of the simulation system from increasing in the height direction, so that it does not restrict the field of view of the operator (e.g. see Para.0057 and Para.0058 of Applicant's original disclosure).

It is also very apparent from the teaching of the prior art that the control unit (e.g. see Ritchie, FIG 1, label 3) is positioned between the left and right main frames, and under the centrally located main frame (see FIG A below regarding the frames identified by the Examiner) in such a way that it does not restrict the field of vision of the operator.

Therefore, the system of the prior art appears to work well for the intended purpose.

Caprai in view of Ritchie teaches the claimed limitations as discussed above.  
Caprai further discloses,

Regarding claim 3, a clutch lever and a brake lever (FIG 3, labels 72 and 76),

Regarding claim 4, a steering handle angle sensor for detecting a turning amount of a tip end portion of the stem member (col.4 lines 37-56 and FIG 5),

Regarding claim 6, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56) and includes a throttle grip for an accelerating operation of the motorcycle displayed on the display (FIG 3, label 68 and col.6, lines 65-67),

Regarding claim 9, the display being a display for a personal computer (col.3, lines 17-20),

Regarding claim 10, a casing being formed in a substantially box shape (FIG 1, label 14),

Caprai does not explicitly disclose, a circuit substrate being disposed in an interior of the casing of the control unit, and a plurality of connection cables being connected to the circuit substrate through connectors.

However, Ritchie teaches, a circuit substrate (FIG 3, label 11) being disposed in an interior of the casing of a control unit (FIG 3, label 3), and a plurality of connection cables being connected to the circuit substrate through connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie.

Regarding claim 17, Caprai discloses the following claimed limitations: a riding simulation system for providing an operator with a simulated experience of a running condition of a motor cycle (col.3, lines 64-66), the system comprising a display for displaying scenery viewable to the operator as a video image on the display (see FIG 1, display *not labeled*), wherein said video image is simulated based on an operating condition designated by the operator through the operation of an operating condition simulating mechanism (col.3, lines 20-27), a steering handle mechanism including a steering stem, and an elongate steering handle capable of being gripped by the operator (FIG 3, labels 42, 56), a body for rotatably securing the steering handle mechanism (FIG 3, label 16), a control unit for said system (FIG 1, label 14).

Caprai further implicitly discloses, the body comprising a pair of left and right main frames (FIG 2, label 28), a centrally located main frame (FIG 2, label 22).

Caprai does not explicitly disclose, a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend from the left and right main frames in a direction away from the operator of the simulation system, the control unit being mounted in a position between linear portions of the pair of main frames; when said body is viewed in side view said linear portion of the left and right main frames can be seen to be oriented at an acute angle  $\alpha$  with respect to the steering stem.

However, Ritchie teaches, a pair of left and right main frames, a centrally located main frame a pair of sub-frames connected to roughly central portions of the right and left main frames (see Examiner's annotated figure, FIG A which is based on FIG 1 of Ritchie's apparatus, label Pair of sub-frames), and a control unit for the system being



mounted in a position between linear portions of the pair of main frames (FIG 1, label 3 and also see FIG A regarding the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by incorporating the apparatus of Ritchie in order to provide a more realistic riding or simulation experience to the user, as taught by Ritchie.

With regard to the recited feature, "the pair of sub-frames extending in a direction away from the operator", according to Applicant's specification, the function of the frames is to attach the simulation system to a flat-surface table (see Para.0035, Para.0049 and Para.0051 of Applicant's disclosure). The prior art (e.g. Caprai) also discloses that the structural features taught in the reference (see e.g. FIG 2, labels 22 and 28) are employed to secure the simulation system on a table (co1.3, lines 45-50).

Therefore, as already discussed with respect to claim 1, it would have been an obvious matter of design choice as to the frame used for securing the simulation system, wherein no stated problem is solved or unexpected result is obtained by prescribing a pair of sub-frames extending in a direction away from the operator; and the teaching of the prior art appears to work well for the intended purpose.

Caprai in view of Ritchie does not explicitly teach, "when said body is viewed in side view said linear portion of the left and right main frames can be seen to be oriented at an acute angle  $\alpha$  with respect to the steering stem".

However, Applicant's disclosure as originally filed (e.g. see Para.0034 of originally filed application) does not disclose any importance as to why such acute angle

arrangement between the *left and right main frames* and the *steering stem* is critical to the current invention (or solves any stated problem); The prior art teaches a left and right main frames supporting the steering stem of the simulator (see FIG A below) so that the user operates the simulator as a realistic motorbike. Therefore, the system of the prior art appears to work well for the intended purpose.

Furthermore, it requires only a routine skill in the art (at the time of the invention was made) to position the steering stem of Ritchie's system (or Caprai's system) at a required angle towards the operator, in order to allow for example a small child to sufficiently reach the grips of the handle.

Regarding claims 11-13 and 16, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Ritchie further teaches, the control unit further including a casing being formed in a substantially in a box shape (FIG 1, label 3), the casing of the control unit is disposed between a first main frame and a second main frame (see FIG A below with the Examiner's interpretation), the casing has a width W in a lateral direction of the body, a height H parallel to the linear portions of the left and right main frames, and a thickness T orthogonal to the width W and the height H (see FIG 3, dimensions not labeled).

Therefore, it would have been obvious to one of ordinary skill in the art at the time o the invention was made to modify the invention of Caprai in view of Ritchie by placing the control unit between a pair of main frames in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (see col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Further, providing plurality of flange portions on a given unit in order to attach the unit to a supporting member is an obvious and well-known expedient at the time of the claimed invention was made.

Caprai in view of Ritchie does not explicitly teach, a space is provided between left and right sides of the casing and the corresponding linear portion of the left and right main frames, the height  $H$  and thickness  $T$  have the relationship  $H > T$ .

However, the above features do not change or affect the principle of operation of the control unit, which is to perform data processing operation on the received data signals and send output to the display reflecting the operation of the simulator (e.g. see Para.0055 and Para.0056 of Applicant's original disclosure). Moreover, Applicant's disclosure (as originally filed) does not disclose any importance as to why this feature (e.g. *providing space between left and right sides of the casing and the corresponding left and right main frames and/or the relationship between the height  $H$  and width  $W$  of the casing should be  $H > T$* ) is critical to the current invention (or solves any stated problem).

Therefore, this does not patentably distinguish the current invention from the prior art, as the system of the prior art appears to work well for the intended purpose.

Regarding claim 14, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Ritchie further teaches, the circuit substrate is disposed in the interior of the casing (FIG 3, label 3), the connectors are disposed at a lower end portion of the circuit

substrate, and the connection cables are connected to the circuit substrate through the connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie.

Regarding claims 18 and 19, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses, the end of the centrally located main frame disposed farthest away from the operator (FIG 2, label 22).

Ritchie further teaches, the end of the centrally located main frame is connected to a cross frame bridging between tip end portions of the sub-frames (see FIG A, the section i.e. wall of the control unit where the end of the pair of sub- frames and end of the central frame are connected).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by linking the end of the steering stem to the sub-frames in order to achieve an optimum force distribution so that the simulation system would be more stable.

Note that regarding the limitation "wherein a front face of the control unit. which is located rearwardly and separately of the cross frame, faces a rear side of the cross frame, and a rear face of the control unit faces away from the operator", as already discussed above, such rearrangement of the control unit does not affect or change the

principle of operation of the device (which is to perform data processing operation on the received data signals and send output to the display reflecting the operation of the simulator (e.g. see Para.0055 and Para.0056 of Applicant's original disclosure).

Thus, the mere rearrangement of the position of the control unit (i.e. positioning it is positioned rearwardly and separately of the cross frame, and the rear face of the control unit faces away from the operator) does not change or affect the principle of operation of the device. Therefore, a mere arrangement of the location of the control unit does not PATENTABLY distinguish the current invention from the prior art.

Note that the criticality regarding the location of the control unit is, it should not restrict the field of vision of the operator (e.g. see Para.0058 of Applicant's original disclosure). It is also apparent from the teaching of the prior art, the control unit (e.g. see Ritchie, FIG 1, label 3) is positioned in such a way that it does not restrict the field of vision of the operator. Therefore, the system of the prior art appears to work well for the intended purpose.

Caprai in view of Ritchie teaches the claimed limitations as discussed above.  
Caprai further discloses,

Regarding claims 20 and 21, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Ritchie further teaches, a cylinder portion for receiving a steering stem, and wherein each of the right, left, and centrally located main frames has an upper end connected to the cylindrical portion (see FIG A below with the examiner's interpretation, the central frame, and the left and right main frames).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by using a cylindrical member in order to rotatably secure the steering stem, as taught by Ritchie.

Note that the above limitation is implicitly taught by Caprai (see FIG 2, labels 22 and 28, and FIG 3, labels 16 and 42).

Regarding claim 22, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses, the riding simulation apparatus adapted to be mounted on an elevated mounting surface (FIG 1), wherein said pair of left and right main frames is adapted to be secured to one side of the elevated mounting surface, and said centrally located main frame is adapted to be secured to an opposite side of the elevated mounting surface (FIG 2, labels 22 and 28).

- Claims 2, 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605 and further in view of Pittarelli 3,964,564.

Regarding claim 2, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses, the steering handle mechanism further comprising a steering stem having a generally fan-shaped upper portion (FIG 3, label 42), an elongate steering handle that is integrally held on the steering stem through a holder (FIG 3, labels 56 and 54), the steering handle mechanism further comprising one of

a clutch lever (FIG 3, label 76) and a brake lever (FIG 3, label 72) are held on the steering handle, and left and right grips which are mounted respectively to end portions of the steering handle (FIG 3, label 60).

Caprai in view of Ritchie does not explicitly teach, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle.

However, Pittarelli teaches, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle (e.g. see FIG 1 labels 141, 142, 144 and col. 6, lines 53-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie and further in view of Pittarelli by using clamps in order to construct the joint portions in a way that the operating levers will be swingable on the handlebar as taught by Pittarelli.

Caprai in view of Ritchie and further in view of Pittarelli teaches the claimed limitations as discussed above. Caprai further discloses,

Regarding claim 5, a steering handle angle sensor for detecting a turning amount of a tip end portion of the stem member (col.4 lines 37-56 and FIG 5),

Regarding claims 7 and 8, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56), and includes a throttle grip (FIG 3, label 68) for an accelerating operation of the motorcycle displayed on the display (col.6, lines 65-67).

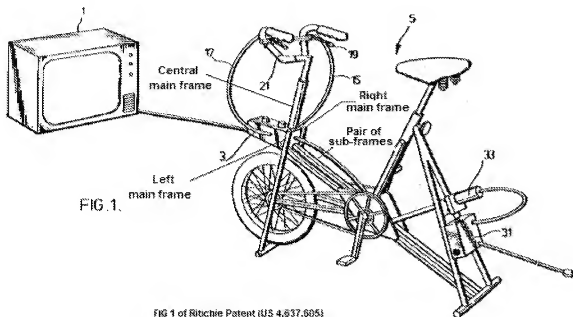


FIG 1 of Ritchie Patent (US 4,837,605)

### ***Response to Arguments.***

5. Applicant's arguments filled on 09/24/2009 have been fully considered but they are not persuasive. In the remarks, Applicant argues that,

(1) While not conceding the appropriateness of the Examiners rejections, but merely to advance the prosecution of the present application, independent claims 1 and 17 have been amended to recite a combination of elements directed to riding simulation system . . .

Regarding the Ritchie reference, as can be seen in the Examiner's annotated FIG 1, a major portion of control box 3 is located above the pair of pipes which the Examiner refers to as "pair of sub-frames". Thus, Ritchie cannot make up for the deficiency of Caprai to reject independent claim 1.

As can be seen in the Examiner's Ritchie annotated FIG 1, the elements referred to by the Examiner as "central main frame" and "left and right main frames" are parallel



to each other. Thus, Ritchie cannot make up for the deficiency of Caprai to reject independent claim 17.

- In response to argument (1), regarding the relative location of the control unit with respect to the pair of sub-frames, the above limitation appears to be a mere arrangement of the control unit without changing or affecting its principle of operation. Note that as already described in the disclosure, the functional limitation of the control unit is to perform data processing operation on the received data signals and send output to the display reflecting the operation of the simulator (e.g. see Para.0055 and Para.0056 of Applicant's original disclosure). Thus, whether the major portion (or all portion) of the control unit is located below the pair of sub-frames (as in the case of the current invention) or above the pair of sub-frames (as in the case of the prior art) does not change or affect the principle of operation of the device. Therefore, a mere arrangement of the location of the control unit does not PATENTABLY distinguish the current invention from the prior art.

Note that what is needed regarding the location of the control unit is, it should not restrict the field of vision of the operator (e.g. see Para.0058 of Applicant's original disclosure). It is also apparent from the teaching of the prior art, the control unit (e.g. see Ritchie, FIG 1, label 3) is located in such a way that it does not restrict the field of vision of the operator.

Moreover, it has been held that the mere arrangement of a device that does not change the operation of the device does not distinguish one invention from another. In *re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) (Claims to a hydraulic power

press which read on the prior art **except** with regard to **the position of the starting switch** were held unpatentable because **shifting the position** of the starting switch **would not have modified the operation of the device.**); In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (the particular placement of a contact in a conductivity measuring device was held to be an obvious matter of design choice).

Applicant further argues the "central main frame" and "left and right main frames" are in parallel to each other according to Ritchie's system. Although one may not certainly conclude such parallel arrangement solely from the figures of the prior art, here also the focus of the argument appears to be on the arrangements of the structures of the device. Note that the functional limitation of the left and right main frames (FIG 2, labels 52b and 52a) appears to be to support the cylindrical portion (FIG 2, label 44) of the simulator, and also to support the control unit between the frames, and to attach the device on a table. These functional limitations have already been taught or suggested by the prior art (see *Claim Rejections - 35 USC § 103* above for detail analysis). In addition, Applicant's disclosure as originally filed (e.g. see Para.0034 of originally filed application) does not disclose any importance as to why such acute angle arrangement between the *left and right main frames* and the *steering stem* is critical to the current invention (or solves any stated problem); and therefore, the system of the prior art appears to work well for the intended purpose.

Furthermore, it requires only a routine skill in the art (at the time of the invention was made) to position the steering stem of Ritchie's system (or Caprai's system) at a

required angle towards the operator, in order to allow for example a small child to sufficiently reach the grips of the handle.

(2) Regarding claim 13, Caprai fails to disclose a control unit with spaces of left and right sides. Ritchie fails to disclose that control box 3 has spaces between the front forks on left and right sides of the control box 3. Regarding claim 16, neither Caprai nor Ritchie teach or suggest the combination of elements in claim 16. Regarding claims 18 and 19, Caprai fails to teach a cross frame. As for Ritchie, the front face of video game (control unit) 3 certainly does not face a rear face of any part of the exercise bike.

- In response to argument (2), the above claimed limitations do not appear to have any criticality (or functional limitation) that is disclosed in Applicant's original disclosure with respect to the particular arrangement of the structure. For example, the prior art does not explicitly teach or suggest the limitation regarding "a space is provided between left and right sides of the casing and the corresponding linear portion of the left and right main frames". However, this does not change or affect the principle of operation of the control unit (see response to argument (1) above). Moreover, Applicant's disclosure (as originally filed) does not disclose any importance as to why this feature (providing space between left and right sides of the casing and the corresponding left and right main frames) is critical to the current invention (or solves any stated problem). Therefore, this does not patentably distinguish the current invention from the prior art, as the system of the prior art appears to work well for the intended purpose.

Regarding the relationship between the height H and thickness T of the control casing, as already indicated above (*Claim Rejections - 35 USC § 112*) this particular limitation does not appear to be disclosed in the original application. Nevertheless, regarding this feature also, there appears to be no criticality in the original disclosure to patentably distinguish the current invention from the prior art. Note that anyhow, even though it is not labeled, the control unit casing taught by the prior art (e.g. Ritchie FIG 1, label 3) also has the height, width and thickness dimensions.

Regarding the positions of the *front face* and *rear face* of the control unit relative to the operator, first of all designating a particular section of the control unit as a *front face* or as a *rear face* depends on once perspective. Furthermore, as already discussed above, the mere arrangement or position of a particular device in a system (i.e. whether it is the *front face* of the control unit that faces away from the operator, or it is the *rear face* of the control unit that faces away from the operator) that does not affect or change the principle of operation of the device, does not patentably distinguish one invention from another. Therefore, such arrangement does not patentably distinguish the current invention from the prior art, since the prior art system appears to work well for the intended purpose (see response to argument (1) above).

Therefore, the Examiner concludes that Applicant's currently presented claimed features have already been taught or suggested by the prior art.

### ***Conclusion***

Applicant's amendment necessitated the new grounds of rejection presented in this final office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §

706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI XUAN can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cameron Saadat/  
Primary Examiner, Art Unit 3715

/Buk A Gebremichael/  
Examiner, Art Unit 3715